

REMARKS

Claims 1, 34, 37, 40 and 43-45 have been amended. Claims 2-3, 35-36, 38-39 and 41-42 have been canceled without prejudice or disclaimer. Claims 46 and 47 have been added. Claims 4-33 were previously withdrawn. Subsequent to the entry of the present amendment, claims 1, 34, 37, 40, 43-47 are pending and at issue. The amendments and additions add no new matter and the claim language is fully supported by the specification and original claims.

I. Amendment to the Claims

Claims 1, 34, 37, 40 and 43-45 have been amended. The claims have been amended to incorporate the subject matter of dependent claims 2-3, 35-36, 38-39 and 41-42, which have been subsequently canceled.

Also, claims 46 and 47 have been added. These claims are supported by claims 37 and 43, which have been canceled.

All amendments to the claims are fully supported by the specification and original claims and no new matter has been added.

II. Objections to the Claims

According to the Office Action, claim 3 is objected to for allegedly claiming substantially duplicate or identical subject matter to claims 36 and 42. Applicants respectfully traverse this object as follows.

Although claims 3, 36 and 42 have been canceled and the objection with regards to these claims is moot, Applicants submit that claims 3, 36 and 42 were not duplicate claims or slight variations thereof. Claim 3 depends on independent claim 1, which is directed to promyostatin polypeptides corresponding to amino acid residues about 1 to 20. Claim 36 depends on independent claim 34, which is directed to polypeptides corresponding to amino acid residues about 20 to 262 or 263. Claim 42 depends on independent claim 40, which is directed to

polynucleotides encoding for peptides corresponding to amino acid residues about 268 to 274 or 375. Thus, claims 3, 30 and 42 all claim different inventive aspects.

Thus, based on the foregoing, there are no duplicative claims as each claim depends from and is directed to different inventive aspects of the claimed invention.

III. Double patenting

Claims 1-3 and 34-43 are rejected under nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent 5,827,733.

Applicants have submitted a Terminal Disclaimer with the amendment filed on September 12, 2002 in response to the Office Action mailed May 15, 2002. According to the Office Action, this Terminal Disclaimer is currently being evaluated (page 3 of the Office Action).

IV. Rejections under 35 U.S.C. §112, First Paragraph (written description)

Claims 1, 34-35, 38 and 40-41 stand rejected under on 35 U.S.C. § 112, first paragraph for allegedly not containing a sufficient written description of the invention. This rejection is maintained for reasons of record as stated in the Final Office Acton mailed May 15, 2002, and as applied to new claims 34-35, 38 and 40-41. Applicants respectfully traverse the rejection as it applies to the amended claims.

According to the current Office Action, which relies on the Office Action mailed May 15, 2002, which also relies on the previous Office Action mailed October 2, 2001, Applicants describe three aspects of promyostatin polypeptides and their respective functions: a signal peptide (corresponding to amino acids about 1 to 20 of a full length promyostatin polypeptide), which interacts with the mature or parent protein; a promyostatin prodomain (corresponding to amino acids about 20 to 262 of a full length promyostatin polypeptide) which inhibits myostatin binding to the activin receptor; and a C-terminal polypeptide (corresponding to amino acids

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about 267 to 375 of a full length promyostatin polypeptide), which binds to the activin receptor (summarized; see page 4 of the Office Action mailed October 2, 2001 and page 3-4 of the Office Action mailed May 15, 2002). Yet, according to the Office Actions, the claims allegedly encompass "peptides that affect all steps in myostatin signaling in all ways (page 3 of the Office Action mailed May 15, 2002)", and that in the absence of particular sequence to reference, amino acid position ranges allegedly have no meaning (page 3 of the Office Action mailed December 7, 2005)".

Applicants submit that the claims have been amended to incorporate the subject matter of dependent claims 2-3, 35-36, 38-39 and 41-42, which have been subsequently canceled. Although the claims have been amended to improve their form, they encompass substantially the same subject matter and clearly define particular domains of promyostatin by both structure and function.

Additionally, with regards to claims 42 to 45, the Office Action has neither rejected nor allowed these claims. The issue is moot with regards to claim 42 because it has been canceled, and claim 43, which has been amended. With regards to claims 44 and 45, it is submitted they are in condition for allowance because they have sequence references and provide meaning to the amino acid position ranges. Thus, the claimed invention is sufficiently described in a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Accordingly, withdrawal of rejection of claims 1, 34-35, 38 and 40-41 under 35 U.S.C. § 112, first paragraph is respectfully requested.

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V. Rejections under 35 U.S.C. §112, First Paragraph (enablement)

Claims 1, 34-35, 38 and 40-41 stand rejected under on 35 U.S.C. § 112, first paragraph, as allegedly containing subject matter not described in the specification in such a way as to enable one of skill in the art to make or use the invention. This rejection is maintained for reasons of record as stated in the Final Office Action mailed May 15, 2002, and as applied to new claims 34-35, 38 and 40-41. Applicants respectfully traverse the rejection as it applies to the amended claims.

According to the present Office Action, which relies on the Office Action mailed May 15, 2002, Applicants describe promyostatin functions including “all means of activation, inhibition, and affects on activation and inhibition... [and] that one skilled in the art would have to make any and all possible portions of myostatin and assay these for any and all possible effects on signaling and effects associated with signaling (see page 5 of the Office Action mailed May 15, 2002)”. Thus, according to the Office Action, the claims are broadly drawn and would require undue experimentation for one of skill in the art.

The claims have been amended to incorporate the subject matter of dependent claims 2-3, 35-36, 38-39 and 41-42, which have been subsequently canceled. That is, the above claims have been amended to include the particular “peptide portions” by sequence and function, although encompassing substantially the same subject matter as they did previously.

Also, similar to the above rejection, with regards to claims 42 to 45, the Office Action has neither rejected nor allowed these claims. The issue is moot with regards to claim 42, which has been canceled, and claim 43, which has been amended. With regards to claims 44 and 45, it is submitted that they are in condition for allowance because they contain “peptide portions” and provide meaning to the amino acid position ranges. Thus, one skilled in the art would not be required to perform undue experimentation in order to make and use the claimed invention.

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Accordingly, withdrawal of rejection of claims 1, 34-35, 38 and 40-41 under 35 U.S.C. § 112, first paragraph is respectfully requested.

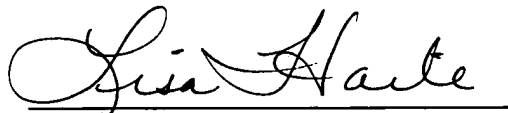
Conclusion

In view of the amendments and above remarks, it is submitted that the claims are in condition for allowance, and a notice to that effect is respectfully requested. The Examiner is invited to contact Applicant's undersigned representative if there are any questions relating to this application.

No fee is deemed necessary with the filing of this paper. However if any fees are due, the Commissioner is hereby authorized to charge any fees, or make any credits, to Deposit Account No. 07-1896 referencing the above-identified attorney docket number. A copy of the Transmittal Sheet is enclosed.

Respectfully submitted,

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